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Water Supply Outlook For Nevada



SOIL CONSERVATION SERVICE
U.S. DEPARTMENT OF AGRICULTURE

Cooperating with

NEVADA DEPARTMENT of CONSERVATION
AND NATURAL RESOURCES
DIVISION OF WATER RESOURCES

AS OF
MAY 1, 1980

TO RECIPIENTS OF WATER SUPPLY OUTLOOK REPORTS:

Most of the usable water in western states originates as mountain snowfall. This snowfall accumulates during the winter and spring, several months before the snow melts and appears as streamflow. Since the runoff from precipitation as snow is delayed, estimates of snowmelt runoff can be made well in advance of its occurrence. Streamflow forecasts published in this report are based principally on measurement of the water equivalent of the mountain snowpack.

Forecasts become more accurate as more of the data affecting runoff are measured. All forecasts assume that climatic factors during the remainder of the snow accumulation and melt season will interact with a resultant average effect on runoff. Early season forecasts are therefore subject to a greater change than those made on later dates.

The snow course measurement is obtained by sampling snow depth and water equivalent at surveyed and marked locations in mountain areas. A total of about ten samples are taken at each location. The average of these are reported as snow depth and water equivalent. These measurements are repeated in the same location near the same dates each year.

Snow surveys are made monthly or semi-monthly from January 1 through June 1 in most states. There are about 1900 snow courses in Western United States and in the Columbia Basin in British Columbia. Networks of automatic snow water equivalent and related data sensing devices, along with radio telemetry are expanding and will provide a continuous record of snow water and other parameters at key locations.

Detailed data on snow course and soil moisture measurements are presented in state and local reports. Other data on reservoir storage, summaries of precipitation, current streamflow, and soil moisture conditions at valley elevations are also included. The report for Western United States presents a broad picture of water supply outlook conditions, including selected streamflow forecasts, summary of snow accumulation to date, and storage in larger reservoirs.

Snow survey and soil moisture data for the period of record are published by the Soil Conservation Service by states about every five years. Data for the current year is summarized in a West-wide basic data summary and published about October 1 of each year.

COVER PHOTO: THE SNOTEL PROJECT CENTRAL COMPUTER FACILITIES IN PORTLAND, OREGON. THE TERMINAL, PRINTER, COMPUTER AND TAPE DRIVES HAVE NOT COMPLETELY REPLACED THE SNOW SAMPLING TUBES SEEN IN THE FOREGROUND.

PUBLISHED BY SOIL CONSERVATION SERVICE

The Soil Conservation Service publishes reports following the principal snow survey dates from January 1 through June 1 in cooperation with state water administrators, agricultural experiment stations and others. Copies of the reports for Western United States and all state reports may be obtained from Soil Conservation Service, West Technical Service Center, Room 510, 511 N.W. Broadway, Portland, Oregon 97209.

Copies of state and local reports may also be obtained from state offices of the Soil Conservation Service in the following states:

STATE	ADDRESS
Alaska	Room 129, 2221 East Northern Lights Blvd., Anchorage, Alaska 99504
Arizona	Room 3008, Federal Building, 230 N. First Ave., Phoenix, Arizona 85025
Colorado (N. Mex.)	P. O. Box 17107, Denver, Colorado 80217
Idaho	Room 345, 304 N. 8th. St., Boise, Idaho 83702
Montana	P. O. Box 98, Bozeman, Montana 59715
Nevada	P. O. Box 4850, Reno, Nevada 89505
Oregon	1220 S. W. Third Ave., Portland, Oregon 97204
Utah	4420 Federal Bldg., 125 South State St., Salt Lake City, Utah 84138
Washington	360 U. S. Court House, Spokane, Washington 99201
Wyoming	P. O. Box 2440, Casper, Wyoming 82602

PUBLISHED BY OTHER AGENCIES

Water Supply Outlook reports prepared by other agencies include a report for California by the Snow Surveys Branch, California Department of Water Resources, P.O. Box 388, Sacramento, California 95802 --- for British Columbia by the Ministry of the Environment, Water Investigations Branch, Parliament Buildings, Victoria, British Columbia V8V 1X5 --- for Yukon Territory by the Department of Indian and Northern Affairs, Northern Operations Branch, 200 Range Road, Whitehorse, Yukon Territory Y1A 3V1 --- and for Alberta, Saskatchewan, and N.W.T. by the Water Survey of Canada, Inland Waters Branch, 110-12 Avenue S.W., Calgary, Alberta T3C 1A6.



WATER SUPPLY OUTLOOK FOR NEVADA

and
FEDERAL - STATE - PRIVATE COOPERATIVE SNOW SURVEYS

Issued by

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WATER SUPPLY OUTLOOK MAILING LIST PURGE CARD	Inside Back Cover

All averages are for 1963-1977 period.

WATER SUPPLY OUTLOOK FOR NEVADA

THIS SUMMER'S SURFACE WATER SUPPLY OUTLOOK CONTINUES TO BE GOOD. SNOW-MELT HAS OCCURRED AT ABOVE AVERAGE RATES. THIS HAS RESULTED IN ABOVE AVERAGE STREAMFLOWS DURING APRIL ON ALL STREAMS EXCEPT THE HUMBOLDT RIVER AT PALISADE. THE SNOW COURSE MEASUREMENTS INDICATE SNOW WATER CONTENTS ARE ABOVE AVERAGE IN THE SIERRA AND BELOW AVERAGE IN OTHER AREAS OF NEVADA.

RESERVOIR STORAGE CONTINUES TO IMPROVE. THE SEVEN MAJOR RESERVOIRS SERVING THE STATE ARE NOW 91 PERCENT OF AVERAGE, THE MOST SINCE MAY 1, 1976. LAKE TAHOE IS ONLY 71 PERCENT OF AVERAGE STORAGE BUT 50 PERCENT OF USABLE STORAGE CAPACITY.

Sierra East Slope

Snow melted at above average rates during April resulting in above average streamflows. Snow course measurements indicate snow water at 124 percent of the May 1 average in the Truckee Basin; 122 percent in the Tahoe Basin; 123 percent in the Carson Basin; and 157 percent in the Walker Basin.

Water supply forecasts for the April 1 to July 31 period are about the same as predicted April 1. Streamflows are forecast at 132 percent on the Truckee River at Farad; 144 percent for the Lake Tahoe Basin; 148 percent for the Carson River at Carson City; and 152 percent for the West Walker River. Lake Tahoe's high elevation is forecast to be 6,227.63 feet, assuming the gates are closed.

Humboldt Basin

Snow course measurements indicate a tremendous amount of snowmelt during the month. The snow water is 70 percent of average with snow on high elevation courses only. Streamflow during the month was 80 percent for the Humboldt River at Palisade. Tributaries to the Humboldt range from below average to slightly above average runoff.

Streamflow forecasts have been decreased slightly from last month but are still near average.

Rye Patch Reservoir contains 163,000 acre-feet as compared to last year's 110,000 acre-feet. There has been a 7,000 acre-feet increase during the month.

Owyhee and Snake Basins

Snow course measurements indicate above average melt this month. Snow water now averages 71 percent of average on the Owyhee River and 76 percent of average on other Snake River Basin streams.

Streamflows during the month were above average. The inflow to Wild Horse Reservoir was double the average amount for April, and now contains 63,000 acre-feet compared to 44,000 acre-feet last year. The increase in storage during May was 17,000 acre-feet.

Streamflow forecasts were decreased slightly from last month but are still near average. The above average melt in April will probably decrease the flow in July.

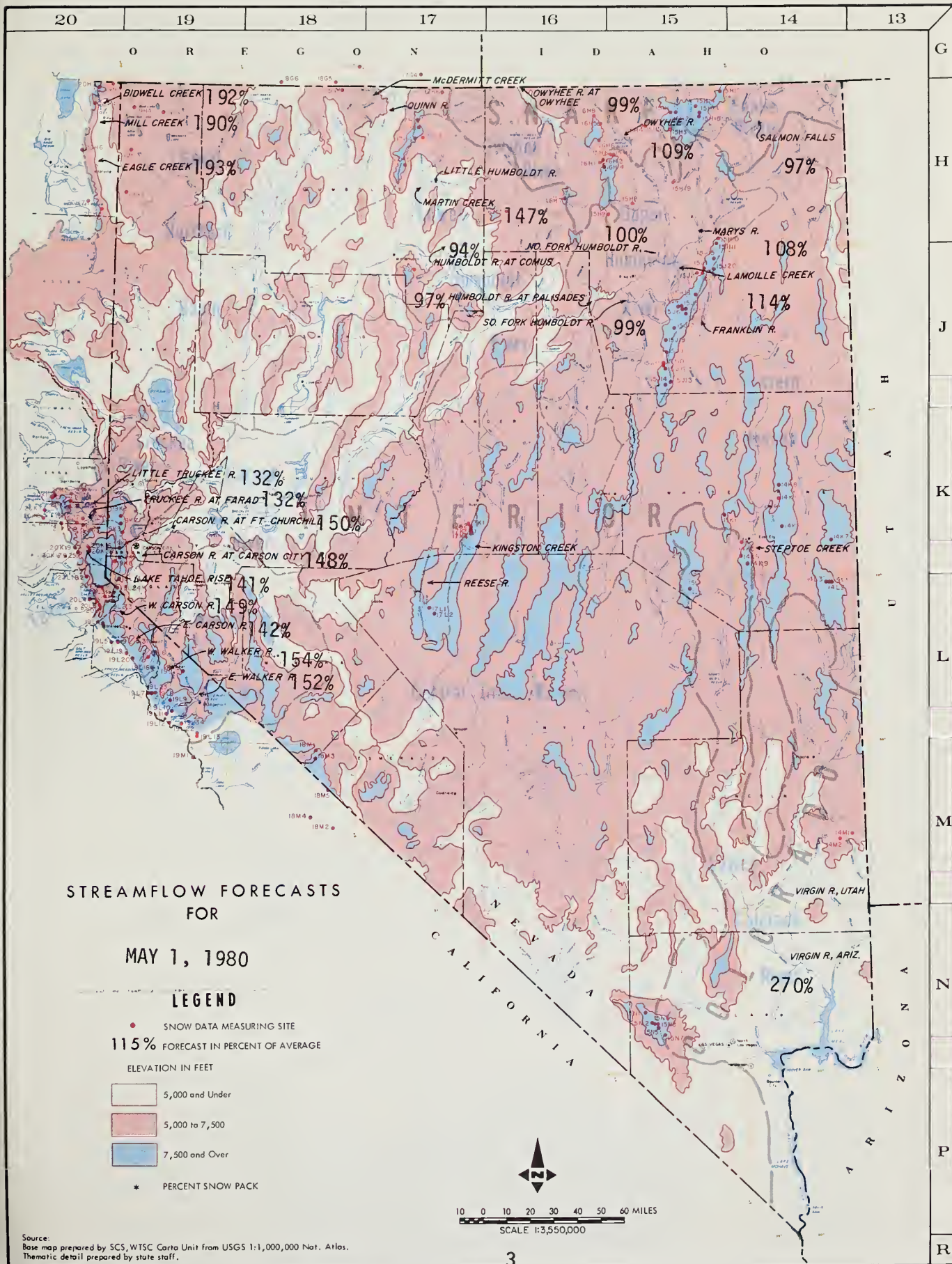
Northern Great Basin

Only two snow courses were measured this month, both in the Warner Mountains. Cedar Pass indicates above average snowmelt during the month and the water content is now slightly below average. Late season flows will be reduced as a result of the early melt.

Eastern Nevada

A limited number of snow courses are measured on May 1 in this area but indicate near average snow water content, and very similar to last year's content.

PROSPECTIVE WATER SUPPLY FOR NEVADA



Source:
Base map prepared by SCS, WTSC Carta Unit from USGS 1:1,000,000 Nat. Atlas.
Thematic detail prepared by state staff.

INDEX TO NEVADA SNOW COURSES

(By Basins)

Refer to the map on the preceeding page for Snow Course locations.

NUMBER	NAME	SEC.	TWP.	RGE.	ELEV.	NUMBER	NAME	SEC.	TWP.	RGE.	ELEV.
SNAKE RIVER BASIN						LAKE TAHOE					
SNAKE RIVER						20L65	Echo Peak (CA)	35	12N	17E	7800
15H15MA	Bear Creek	31	46N	58E	7800	20L5	Echo Summit (CA)	6	11N	18E	7450
15H2	Fox Creek	33	46N	58E	6800	20L105	Fallen Leaf (CA)	36	13N	17E	6300
15H135A	Goat Creek	31	46N	60E	8800	19L2	Freel Bench (CA)	36	12N	18E	7300
15H15A	Hummingbird Springs	6	45N	60E	8945	19K6	Glenbrook #2	13	14N	18E	6900
15H20a	Merritt Mountain	10	46N	54E	7000	19L3MS	Hagans Meadow (CA)	36	12N	18E	8000
15H145A	Pole Creek Ranger Station	13	46N	59E	8330	19L245	Heavenly Valley (CA)	1	12N	18E	8850
15H18a	Red Point	15	47N	61E	7940	20L4	Lake Lucille (CA)	28	12N	17E	8200
15H35A	76 Creek	6	44N	58E	7100	19K4MS	Marlette Lake	18	15N	19E	8000
15H19a	Stag Mountain	32	41N	58E	7800	20L3	Richardsons #2 (CA)	6	12N	18E	6500
OWYHEE RIVER						20L1	Rubicon #1 (CA)	6	13N	17E	8100
15H45M	Big Bend	30	45N	56E	6700	20L25	Rubicon #2 (CA)	6	13N	17E	7500
16H6a	Columbia Basin	31	44N	53E	6650	20K16	Tahoe City (CA)	6	15N	17E	6250
16H8a5	Fawn Creek	2	45N	52E	7000	20K26	Tahoe City Alt. (CA)	7	15N	17E	6300
15H5	Gold Creek	32	45N	56E	6600	20K275	Tahoe City Cross (CA)	1	15N	16E	6750
16H1M	Jack Creek, Lower	18	42N	53E	6800	19L1	Upper Truckee (CA)	21	12N	18E	6400
16H25AM	Jack Creek, Upper	9	42N	53E	7250	20K255	Ward Creek (CA) #3	21	15N	16E	6750
16H45	Jacks Peak	21	42N	53E	8420	20K17	Ward Creek #2 (CA)	21	15N	16E	7000
16H55	Laurel Draw	20	45N	53E	6700	TRUCKEE RIVER					
17G4a	Louse Canyon (OR)	27	40S	44E	6440	20K14	Boca #2 (CA)	28	18N	17E	5900
15H9MP5	Taylor Canyon	35	39N	53E	6200	20K22	Brookway Summit (CA)	3	17N	16E	7100
INTERIOR						20K21	Donner Park #2 (CA)	18	17N	16E	6000
UPPER HUMBOLDT RIVER						20K10	Donner Summit (CA)	25	17N	14E	6900
15J17a	American Beauty	32	31N	58E	7800	20K7*	Forrvce Lake (CA)	34	18N	13E	6500
15J125A	Corral Canyon	27	28N	57E	8500	20K8*	Furnace Flat (CA)	10	17N	13E	6700
15J15M	Dorsey Basin	28	35N	60E	8100	20K4MS	Independence Camp (CA)	34	19N	15E	7000
15J3	Dry Creek	5	34N	60E	6500	20K35	Independence Creek (CA)	14	19N	15E	6500
15J95M	Fry Canyon	31	43N	54E	6700	20K55	Independence Lake (CA)	9	18N	15E	8450
15J10	Green Mountain	23	29N	57E	8000	19K3	Little Valley	17	16N	19E	6300
15J11	Harrison Pass #1	9	28N	57E	6600	19K25	Mt. Rose	7	17N	19E	9000
15J11	Harrison Pass #2	16	28N	57E	7400	19K75	Mt. Rose Ski Area	30	17N	19E	9000
15J4	Lamoille #1	15	32N	58E	7100	20K6	Sage Hen Creek (CA)	7	18N	16E	6500
15J65	Lamoille #3	24	32N	58E	7700	20K19	Squaw Valley #2 (CA)	6	15N	16E	7500
15J8P	Lamoille #5	31	32N	59E	8700	20K135	Truckee #2 (CA)	22	17N	16E	6400
15J20	Pole Canyon #2	6	34N	61E	7700	20K2*	Webber Lake (CA)	29	19N	14E	7000
15J16a	Robinson Lake	23	33N	59E	9200	20K1*	Webber Peak (CA)	30	19N	14E	8000
15H6MP	Rodeo Flat	36	43N	53E	6800	CARSON RIVER					
15J2	Ryan Ranch	1	34N	59E	5800	19L55	Blue Lakes (CA)	30	9N	19E	8000
15J19	Smith Creek	26	30N	57E	7600	19L4	Carson Pass, Upper (CA)	22	10N	18E	8600
15H8	Tremewan Ranch	9	39N	55E	5700	19K5	Clear Creek	6	14N	19E	7300
15H10P	Trout Creek, Lower	28	37N	61E	6900	19L19A5	Ebbetts Pass (CA)	17	8N	20E	8700
15H11A	Trout Creek, Upper	4	36N	61E	8500	19L16a	Fish Valley, Upper (CA)	1	7N	22E	8050
LOWER HUMBOLDT RIVER						19L065	Poison Flat (CA)	25	8N	21E	7900
17K1	Big Creek Campground	10	17N	43E	6600	19L315	Wet Meadows #2 (CA)	26	9N	19E	8050
17K45	Big Creek Summit	35	17N	43E	8700	19L18A	Wet Meadows Lake (Cal.)	25	9N	19E	8100
17K2	Big Creek Mine	23	17N	43E	7600	19L20a	Wolf Creek (Cal.)	35	8N	20E	8000
17K3	Big Creek, Upper	26	17N	43E	7800	WALKER RIVER					
17H25	Buckskin, Lower	25	45N	39E	6700	19L11	Buckeye Forks (CA)	20	4N	23E	8500
17H1	Buckskin, Upper	11	45N	39E	8200	19L10	Buckeye Roughs (CA)	15	4N	23E	7900
17L1	Corral, Lower	12	11N	40E	7500	19L12	Center Mountain (CA)	4	3N	23E	9400
17L2	Corral, Upper	20	11N	41E	8000	19L85	Leavitt Meadows (CA)	4	5N	22E	7200
17L32	Golconda #2	22	35N	39E	6000	19L175A	Lobdell Lake (CA)	20	7N	24E	9200
17H45	Granite Peak	22	44N	39E	7800	19L34	Sawmill Ridge (CA)	17	3N	24E	8750
17H55	Lanance Creek	13	42N	38E	6000	19L7	Sonora Pass (CA)	1	5N	21E	8800
17H3	Martin Creek	13	44N	39E	6700	19L235	Sonora Pass Bridge (CA)	6	5N	22E	8800
16H3AP	Midas	18	39N	46E	7200	19M1*	Tioga Pass (CA)	30	1N	25E	9900
16H7a	Toe Jam	29	40N	50E	7700	19L13	Virginia Lakes (CA)	5	2N	25E	9500
EASTERN NEVADA						19L22M5	Virginia Lakes Ridge (CA)	32	2N	25E	9200
14L1	Baker #1	29	13N	69E	7950	19L9	Willow Flat (CA)	21	5N	23E	8250
14L2	Baker #2	30	13N	69E	8950	COLORADO					
14L3	Baker #3	25	13N	68E	9250	LOWER COLORADO RIVER					
14K25	Berry Creek	26	17N	65E	9100	15N5	Kyle Canyon	27	19S	56E	8200
14K1	Bird Creek	34	19N	65E	7500	15N3	Lee Canyon #2	9	19S	56E	9200
14K9a	Defiance Mines	9	14N	63E	9200	15N8	Lee Canyon #3	10	19S	56E	8500
15J155	Hole-in-Mountain	6	35N	61E	7900	14M1	Mathew Canyon	23	6S	69E	6200
14K8	Kalamazoo Creek	34	20N	65E	7400	15N7	Rainbow Canyon #2	6	20S	57E	8100
14K3	Murray Summit	25	16N	62E	7250	15L1	White River #1	31	13N	59E	7400
15K1	Robinson Summit	34	18N	61E	7600	LEGEND					
14K7	Silver Creek #2	30	16N	69E	8000	NUMBERING SYSTEM (EXAMPLE)					
14K55	Ward Mountain #2	25	15N	62E	8900	19K4	Snow Course Only				
CENTRAL GREAT BASIN						19K45	Snow Course with SNOTEL				
18M2	Campito Mountain (CA)	19	55	35E	10200	19K4M	Snow Course and Soil Moisture				
18M5a	Chiatovich Flat (CA)	32	25	34E	10500	19K4A	Snow Course and Aerial Marker				
15N2	Clark Canyon	8	19S	56E	9000	19K4P	Snow Course and Storage Precipitation Gage				
18M1	Montgomery Pass	4	1N	33E	7100	19K4MA	Snow Course, Soil Moisture and Aerial Marker				
18M3a	Pinchot Creek (CA)	28	1N	33E	9300	19K4MP	Snow Course, Soil Moisture, and Precipitation Gage				
18M4a	Piute Pass (CA)	33	4S	33E	11700	Lower case letter "a" indicates no snow course, only an Aerial Marker.					
15N1	Trough Springs	23	18S	55E	8500	SNOTEL has telemetered data for snow pillow, precipitation gage, and temperature. * Adjacent basin					
NORTHERN GREAT BASIN											
19H1a	Bald Mountain	17	45N	21E	6270						
20H5	Barber Creek (CA)	23	39N	16E	6500						
20H65	Cedar Pass (CA)	12	43N	14E	7100						
18G6a	Genio Creek (OR)	14	41S	34E	6000						
18H15	Oisaster Peak	8	47N	34E	6500						
20H3a5	Oismal Swamp (CA)	31	48N	17E	7000						
20H7	Eagle Peak (CA)	35	40N	15E	7200						
19H3	49 Mountain	7	42N	19E	6000						
19H2	Hays Canyon	1	39N	18E	6400						
19H4a	Little Bally Mountain	8	45N	19E	6000						
20H9	Mt. Bidwell (CA)	6	47N	16E	7200						
20H10	North Star (CA)	13	47N	16E	6200						
17G5a	Oregon Canyon (OR)	9	40S	40E	7240						
17H6a	Quinn Ridge	9	47N	41E	6300						
20H4	Reservation Creek (CA)	12	46N	15E	5900						
18G5a	Trout Creek (OR)	10	41S	38E	7800						

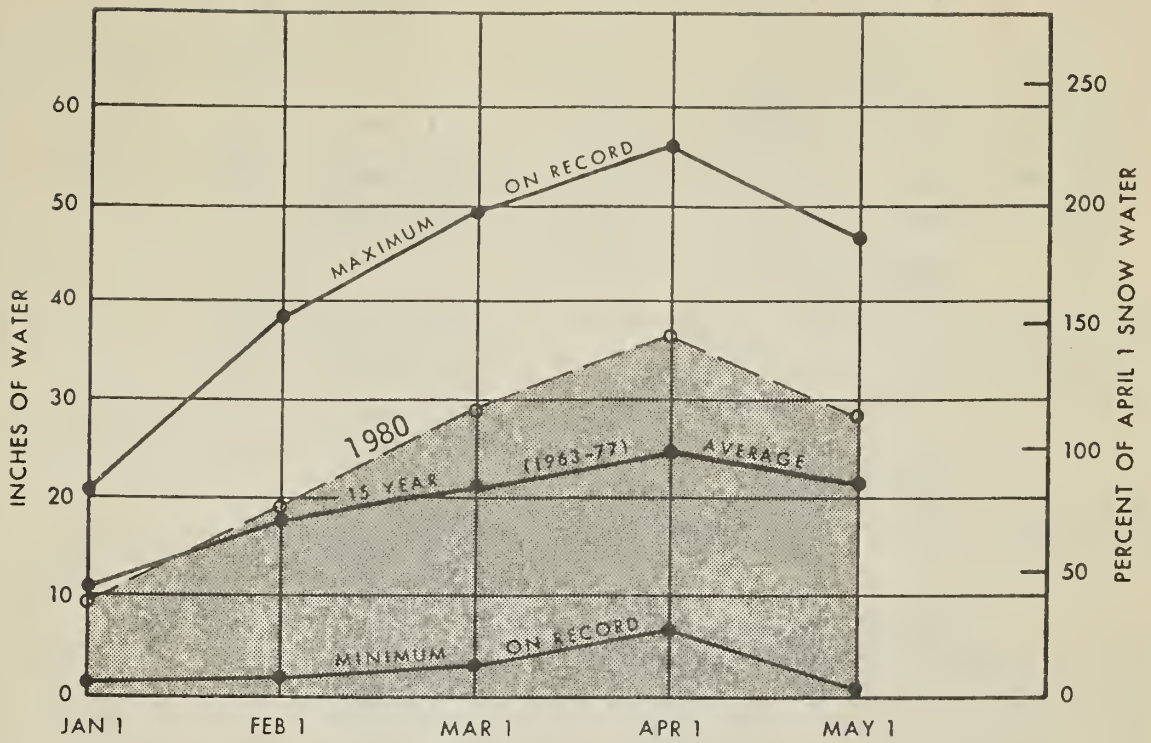
WINTER SNOWPACK

TAHOE, TRUCKEE, CARSON & WALKER BASINS

CALIFORNIA - NEVADA

1980

Data based on 9 long term Snow Courses



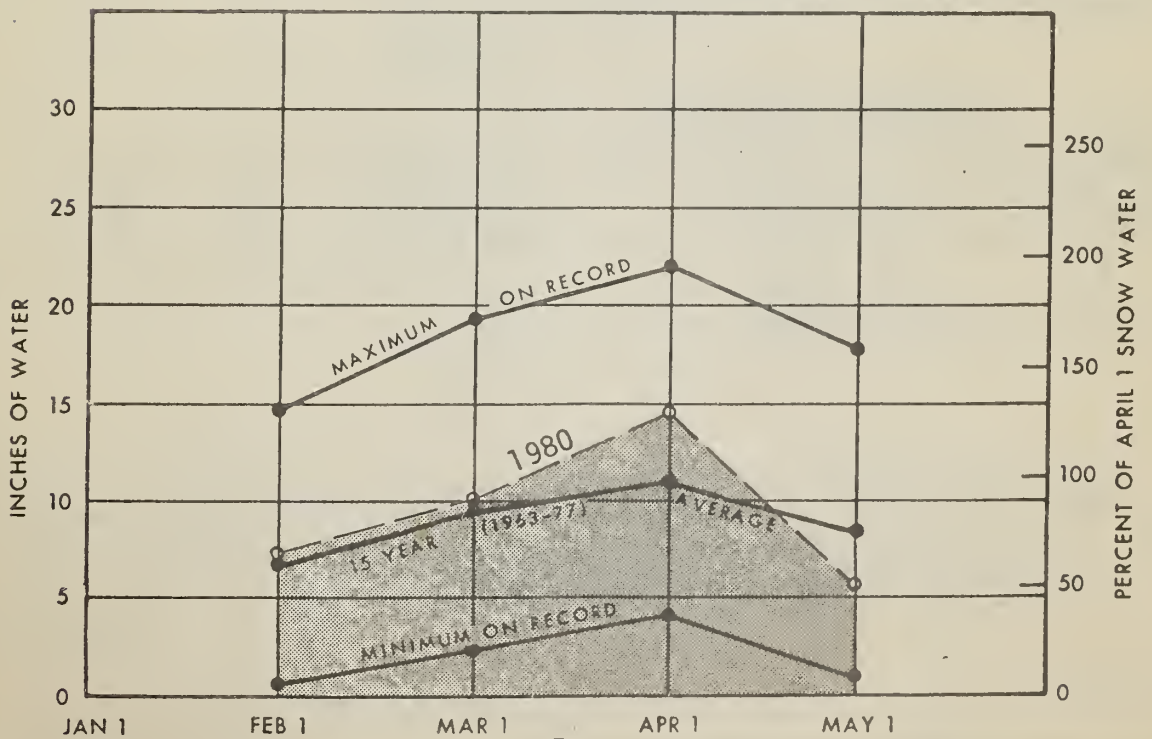
WINTER SNOWPACK

UPPER HUMBOLDT & SNAKE BASINS

NEVADA

1980

Data based on 13 selected Snow Courses



U.S. GOVERNMENT PRINTING OFFICE: 1975 M 7 - L - 22025 W

STREAMFLOW FORECASTS (Thousand Acre Feet) as of: May 1, 1980

Forecasts are based on snow-water presently stored in the mountain watersheds and the assumption that precipitation will be near average throughout the forecast period. Peak flow forecasts indicate the most probable range for the maximum average 24-hour flow. All averages are for 1963-77 period.

FORECAST POINT	Forecast Period	Forecast This Year	This Year as Percent of Average	Average +
<u>TRUCKEE RIVER</u>				
Little Truckee River above Boca, CA	April-July	115	132	87
Truckee River at Farad, CA ^{1/}	April-July	360	132	273
Lake Tahoe Rise in Feet (from April 1, assuming gates closed)	April 1 to high elev.	2.0	141	1.42
<u>CARSON RIVER</u>				
East Carson near Gardnerville, NV	April-July	265	142	187
West Carson at Woodfords, CA	April-July	80	149	53
Carson River near Carson City, NV	April-July	270	148	183
Carson River at Fort Churchill, NV	April-July	250	150	167
<u>WALKER RIVER</u>				
East Walker near Bridgeport, CA ^{2/}	April-Aug.	105	152	69
West Walker below Little Walker near Coleville, CA	April-July	225	154	146
<u>HUMBOLDT RIVER</u>				
Lamoille Creek near Lamoille, NV	April-July	32	114	28
South Fork Humboldt above Dixie Creek	April-July	72	99	73
Marys River above Hot Springs, NV	April-July	40	108	37
North Fork Humboldt at Devils Gate, NV	April-July	35	100	35
Humboldt River at Palisade, NV	April-July	215	97	221
Humboldt River at Comus, NV	April-July	165	94	175
Martin Creek near Paradise, NV	April-July	22	147	15
<u>SNAKE RIVER</u>				
Owyhee River near Owyhee, NV ^{3/}	April-July	79	99	80
Owyhee River near Gold Creek, NV ^{3/}	April-July	24	109	22
Salmon Falls Creek near San Jacinto, NV	May-July	56	97	58
	May-Sept.	60	95	63
<u>NORTHERN GREAT BASIN</u>				
Bidwell Creek near Ft. Bidwell, CA	April-July	23	192	12
Mill Creek near Cedarville, CA	April-July	7.8	190	4.1
Deep Creek near Cedarville, CA	April-July	7.0	194	3.6
Eagle Creek near Eagleville, CA	April-July	8.3	193	4.3
<u>COLORADO RIVER</u>				
Virgin River at Littlefield, AZ	May-June	79	270	29

NOTE: Streamflow forecasts which appear in this bulletin are a coordinated activity of the National Weather Service and the Soil Conservation Service in an effort to provide the best possible forecasting service to water users.

1. Observed flow plus change in storage in Boca, Stampede, Prosser Reservoir, Donner, Independence and Martis Creek Lakes and minus the flow at Truckee River at Tahoe City, CA.
2. Observed flow plus change in storage in Bridgeport Reservoir.
3. Observed flow plus change in storage in Wild Horse Reservoir.

+1963-1977 period

RESERVOIR STORAGE (Thousand Acre Feet) AS OF May 1, 1980

Basin or Stream	RESERVOIR	Usable Capacity	Usable Storage		
			This Year	Last Year	Average†
Owyhee	Wild Horse	72	63	44	43
Lower Humboldt	Rye Patch	172	163	110	135
Colorado	Mohave	1,810	1,551	1,531	1,700
Colorado	Mead	26,159	23,198	22,918	17,200
Tahoe	Tahoe	732	365	164	513
Truckee	Boca	41	23	35	30
Truckee	Stampede**	220	132	65	129*
Truckee	Prosser***	30	20	13	12*
Carson	Lahontan	291	246	273	237
West Walker	Topaz	59	46	50	42
East Walker	Bridgeport	42	31	36	32

* Adjusted average.
 ** Storage began August 1, 1969.
 *** Flood Control use allocation of 20,000 acre-feet between November 1 and April 10.

TOTAL RESERVOIR STORAGE (Thousand Acre Feet)

MONTH	This Year	Last Year	Average †
October 1	430	472	786
January 1	432	422	844
February 1	676	495	920
March 1	795	541	968
April 1	875	646	1,010
May 1	937	712	1,032

The above data developed from Wild Horse, Rye Patch, Tahoe, Boca, Lahontan, Topaz, and Bridgeport Reservoirs in 1,000 Acre-feet.

TOTAL USABLE CAPACITY 1,409

PEAK FLOWS (MAXIMUM MEAN DAILY) (Av. flow for 24 hrs. on day of greatest flow)

FORECAST POINT	PEAK FLOW (SECOND FEET)	
	Forecast Range	Average †
East Fork Carson River near Gardnerville, NV	2,300-2,500	1,865
Carson River near Carson City, NV	2,600-2,800	2,098
Carson River near Fort Churchill, NV	2,300-2,500	1,914
W. Walker R. below L. Walker R. nr Coleville, CA	2,000-2,200	1,589

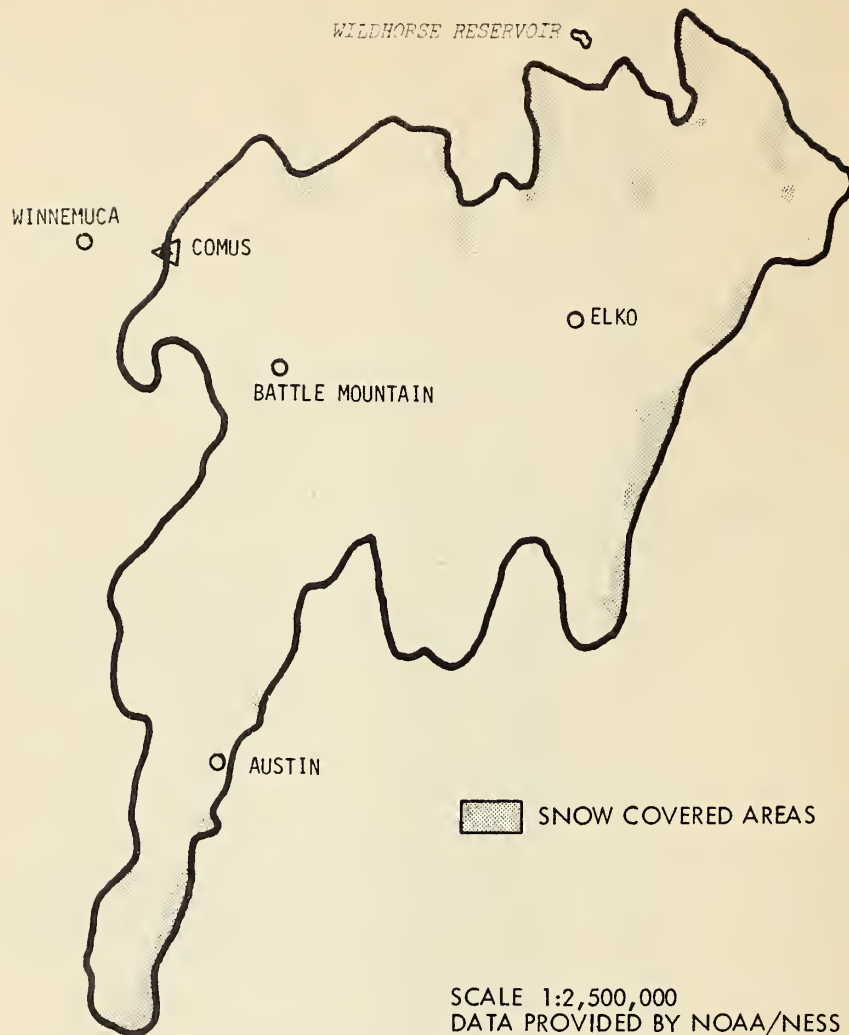
FORECAST DATE of LOW FLOW VALUES

FORECAST POINT	Low Flow Value Second/Ft.	Forecast Date Stream Will Recede to Low Flow Value	Average Date of Low Flow Value
East Carson River near Gardnerville, NV	200	8/8	7/24

SATELLITE SNOW COVER

HUMBOLDT RIVER ABOVE COMUS, NEVADA

APRIL 26, 1980



SCALE 1:2,500,000
DATA PROVIDED BY NOAA/NESS
WASHINGTON, D.C.

<u>DATE</u>	<u>PERCENT SNOW COVER</u>	<u>DATE</u>	<u>PERCENT SNOW COVER</u>
March 29, 1980	16.0%		
April 8, 1980	13.5%		
April 12, 1980	11.0%		
April 19, 1980	7.0%		
April 26, 1980	5.0%	April 25, 1979	10.0%

SATELLITE SNOW COVER

TAHOE-TRUCKEE, CARSON AND WALKER BASINS

APRIL 26, 1980



SCALE 1:2,000,000
DATA PROVIDED BY NOAA/NESS
WASHINGTON D.C.

<u>DATE</u>	<u>BASIN</u>	<u>PERCENT SNOW COVER</u>
March 29, 1980	TAHOE	24%
March 29, 1980	CARSON	11%
March 29, 1980	WALKER	27%
April 26, 1980	TAHOE	26%
April 26, 1980	CARSON	10%
April 26, 1980	WALKER	21%
<u>LAST YEAR</u>		
April 28, 1979	TAHOE	16%
April 28, 1979	CARSON	7%
April 28, 1979	WALKER	10%

SNOW COURSE MEASUREMENTS

SNOW COURSE MEASUREMENTS		THIS YEAR			PAST RECORD	
DRAINAGE BASIN and/or SNOW COURSE		Date of Survey	Snow Depth (inches)	Water Content (inches)	Water Content	
NAME	Elevation				Last Year	Average †
LAKE TAHOE						
Echo Peak (CA)	7,800	4/24/80	93	45.8	28.4	-
Echo Summit (CA)	7,450	4/29/80	64	30.9	21.0	26.2
Freel Bench (CA)	7,300	4/24/80	1	0.1	2.8	5.8*
Hagans Meadow (CA)	8,000	4/24/80	39	17.8	8.4	12.3*
Heavenly Valley (CA)	8,800	4/24/80	77	37.5	25.0	24.2*
Marlette Lake	8,000	4/24/80	63	28.6	17.4	20.6*
Rubicon #2 (CA)	7,500	4/24/80	79	36.6	27.9	-
Upper Truckee (CA)	6,400	4/24/80	1	0.1	0.0	2.2*
Ward Creek #2 (CA)	7,000	4/29/80	93	44.7	33.6	38.8
Ward Creek #3 (CA)	6,750	4/24/80	91	44.6	31.6	37.9*
Summary: Total Snow Courses = 8						
Snow Water Content Inches				(204.3)	(139.8)	(168.0)
Percent of Last Year; Average					(146%)	(122%)
TRUCKEE RIVER						
Donner Summit (CA)	6,900	4/29/80	79	40.1	28.7	33.6*
Fordyce Lake (CA) ^b	6,500	4/28/80	84	43.9	41.1	38.1*
Furnace Flat (CA) ^b	6,700	4/28/80	104	56.7	44.0	45.5
Independence Camp (CA)	7,000	4/24/80	51	22.1	11.4	17.4*
Independence Creek (CA)	6,500	4/24/80	19	7.9	2.2	6.6*
Independence Lake (CA)	8,450	4/24/80	120	55.6	34.3	46.9*
Mount Rose	9,000	4/24/80	94	43.6	33.4	0.0
Mount Rose Ski Area	8,850	4/29/80	113	54.9	37.8	38.8*
Squaw Valley #2 (CA)	7,500	4/24/80	134	62.0	46.7	51.7*
Squaw Valley Gold Coast (CA)	8,200	4/14/80	174	64.9	-	-
Summary: Total Snow Courses = 6						
Snow Water Content Inches				(242.6)	(161.1)	(195.0)
Percent of Last Year; Average					(151%)	(124%)
CARSON RIVER						
Blue Lakes (CA)	8,000	5/1/80	92	42.0	34.2	33.7
Carson Pass, Upper (CA)	8,600	4/28/80	82	40.3	30.1	33.1
Ebbetts Pass AM (CA)	8,700	4/25/80	129	64.5 _α		
Ebbetts Pass #2 (CA)	8,700	4/25/80	117	58.2	39.2	-
Poison Flat AM (CA)	7,900	4/25/80	26	11.2 _α		
Poison Flat (CA)	7,900	4/25/80	43	18.5	12.5	-
Wet Meadows Lake AM (CA)	8,050	4/25/80	76	38.0 _α		
Wet Meadows #2 (CA)	8,050	4/25/80	110	54.7	42.7	-
Summary: Total Snow Courses =						
Snow Water Content Inches				(82.3)	(64.3)	(66.8)
Percent of Last Year; Average					(128%)	(123%)

† 1963-1977 period.

SNOW COURSE MEASUREMENTS

DRAINAGE BASIN and/or SNOW COURSE		THIS YEAR			PAST RECORD	
		Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Water Content (inches)	
NAME	Elevation				Last Year	Average †

WALKER RIVER

Leavitt Lake (CA)	9,400	4/25/80	154	68.6	-	-
Leavitt Meadows (CA)	7,200	4/25/80	22	7.8	6.6	-
Lobdell Lake (CA)	9,200	4/25/80	57	25.0	16.6	-
Sawmill Ridge (CA)	8,750	NS	-	-	15.7	-
Sonora Pass (CA)	8,800	4/25/80	75	34.0 _e	24.8	20.3
Sonora Pass Bridge (CA)	8,800	4/25/80	78	33.8	26.2	26.3
Virginia Lakes (CA)	9,500	4/25/80	54	24.2	15.3	15.1*
Virginia Lakes Ridge (CA)	9,200	4/25/80	71	29.6	19.0	16.0*
Summary: Total Snow Courses = 4						
Snow Water Content Inches				(121.6)	(85.3)	(77.7)
Percent of Last Year; Average					(143%)	(157%)

OWYHEE RIVER

Big Bend	6,700	5/2/80	0	0.0	5.0	2.4
Fawn Creek #2	7,000	5/2/80	14	6.0	21.0	-
Gold Creek	6,600	5/2/80	0	0.0	0.0	1.0
Jack Creek, Lower	6,800	5/2/80	0	0.0	0.0	0.8
Jack Creek, Upper	7,250	5/2/80	0	0.0	9.0	4.7
Jack Creek #2, Upper	7,250	5/2/80	25	10.4	21.0	-
Jacks Peak	8,420	5/2/80	55	23.9	27.4	26.8
Taylor Canyon	6,200	5/2/80	0	0.0	0.0	0.5
Laurel Draw	6,700	5/2/80	0	0.0	5.6	-
Summary: Total Snow Courses = 5						
Snow Water Content Inches				(23.9)	(57.4)	(33.8)
Percent of Last Year; Average					(42%)	(71%)

SNAKE RIVER

Bear Creek	7,800	5/2/80	38	15.2	23.1	20.8
Goat Creek	8,800	5/1/80	46	18.3	22.5	20.9
Hummingbird Springs	8,945	NS	-	-	23.0	27.7
Pole Creek Ranger Station	8,330	5/1/80	46	18.6	21.4	23.6
Seventy Six Creek	7,100	5/2/80	0	0.0	11.3	3.2*
Summary: Total Snow Courses = 4						
Snow Water Content Inches				(52.1)	(78.3)	(68.5)
Percent of Last Year; Average					(67%)	(76%)

UPPER HUMBOLDT RIVER

Corral Canyon	8,500	5/2/80	26	10.7	19.9	-
Dorsey Basin	8,100	5/2/80	8	3.2	17.8	-
Fry Canyon	6,700	5/2/80	0	0.0	0.0	1.5
Green Mountain	8,200	5/2/80	0	0.0	11.5	-
Lamoille #1	7,100	5/2/80	0	0.0	5.7	4.4*
Lamoille #3	7,700	5/2/80	7	3.4	10.2	8.3*
Lamoille #5	8,700	5/2/80	61	28.6	33.4	30.0*
Rodeo Flat	6,800	5/2/80	0	0.0	3.3	1.5
Tremewan Ranch	5,700	5/2/80	0	0.0	0.0	-
Summary: Total Snow Courses = 5						
Snow Water Content Inches				(32.0)	(52.6)	(45.7)
Percent of Last Year; Average					(61%)	(70%)

† 1963-1977 period.

SNOW COURSE MEASUREMENTS

DRAINAGE BASIN and/or SNOW COURSE		THIS YEAR			PAST RECORD	
		Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Water Content (inches)	
NAME	Elevation				Last Year	Average †

EASTERN NEVADA

Berry Creek	9,100	4/24/80	45	17.4	17.0	16.3*
Bird Creek	7,500	4/24/80	0	0.0	0.0	-
Ward Mountain	8,900	4/24/80	26	9.9	10.0	-
Summary: Total Snow Courses = 1						
Snow Water Content Inches				(17.4)	(17.0)	(16.3)
Percent of Last Year; Average					(102%)	(107%)

NORTHERN GREAT BASIN

Cedar Pass (CA)	7,100	4/29/80	32	14.3	19.6	15.2*
Dismal Swamp #2 (CA)	7,000	4/30/80	62	25.8	-	-
Summary: Total Snow Courses = 1						
Snow Water Content Inches				(14.3)	(19.6)	(15.2)
Percent of Last Year; Average					(73%)	(94%)

DESERT RESEARCH INSTITUTE MEASUREMENTS

TAHOE-TRUCKEE BASIN

Alder Creek	6,960	4/29/80	66	33.0	29.0	-
Apollo Way	7,300	4/30/80	0	0.0	0.0	-
Bennett Flat	6,200	4/29/80	0	0.0	0.0	-
Davis Creek	5,160	4/30/80	0	0.0	0.0	-
Evergreen Hills	5,700	4/30/80	0	0.0	0.0	-
Galena Creek	7,440	4/30/80	36	16.2	14.3	-
Hennes Pass Junction	6,410	4/29/80	18	7.5	7.4	-
Hobart Mills	5,850	4/29/80	0	0.0	0.0	-
Incline Lake	8,000	4/30/80	42	20.4	15.7	-
Jones Creek	6,000	4/30/80	0	0.0	0.0	-
Mt. Rose Resort	8,280	4/30/80	74	39.0	24.1	-
North Star Fire Department	6,320	4/30/80	0	0.0	0.0	-
RNR Test Site	6,400	4/30/80	0	0.0	0.0	-
Sky Tavern	7,620	4/30/80	21	10.2	4.4	-
Spooner Summit	7,620	4/30/80	0	0.0	0.0	-
Squaw Valley Fire Department	6,240	4/30/80	0	0.0	0.0	-
Sundance Lodge	7,060	4/30/80	0	0.0	0.0	-
Tahoe City	6,240	4/30/80	0	0.0		-
Tahoe Meadows	8,540	4/30/80	103	50.1	42.0	-
Tamarack Lake	8,820	4/30/80	90	47.1	33.7	-
Third and Incline Creeks	6,235	4/30/80	0	0.0	0.0	-
Thunder Cliff	6,200	4/30/80	0	0.0	0.0	-
Truckee Airport	5,900	4/30/80	0	0.0	0.0	-
White Creek	5,670	4/30/80	0	0.0	0.0	-

a Aerial Marker

b Located on adjacent basin

c Estimated

d Less than 15 year record

NS Not scheduled this month

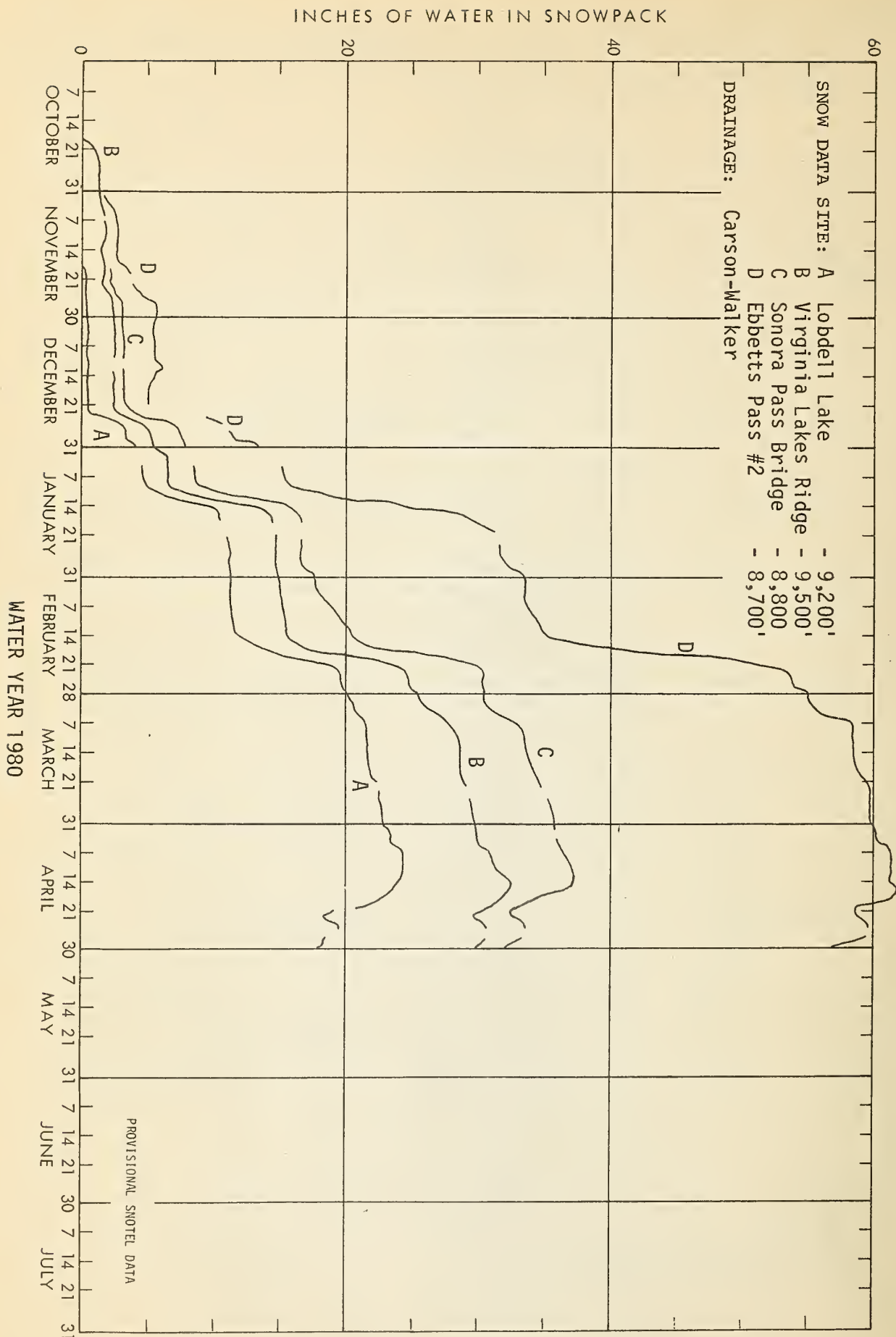
NOTE:

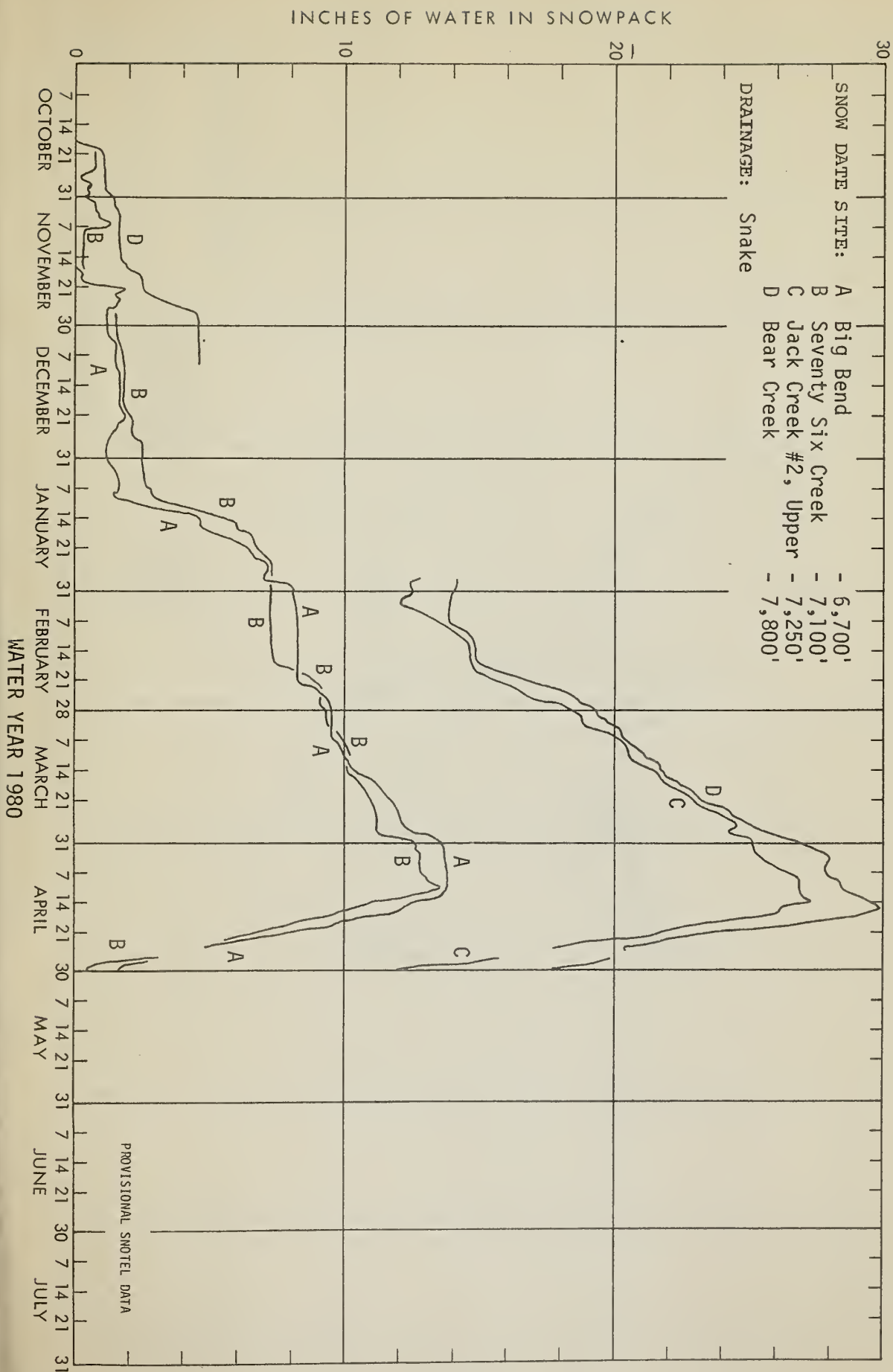
All averages based on 1963-77, 15 year period. Forecast period is April 1 through July 31 unless otherwise noted.

+1963-1977 period.

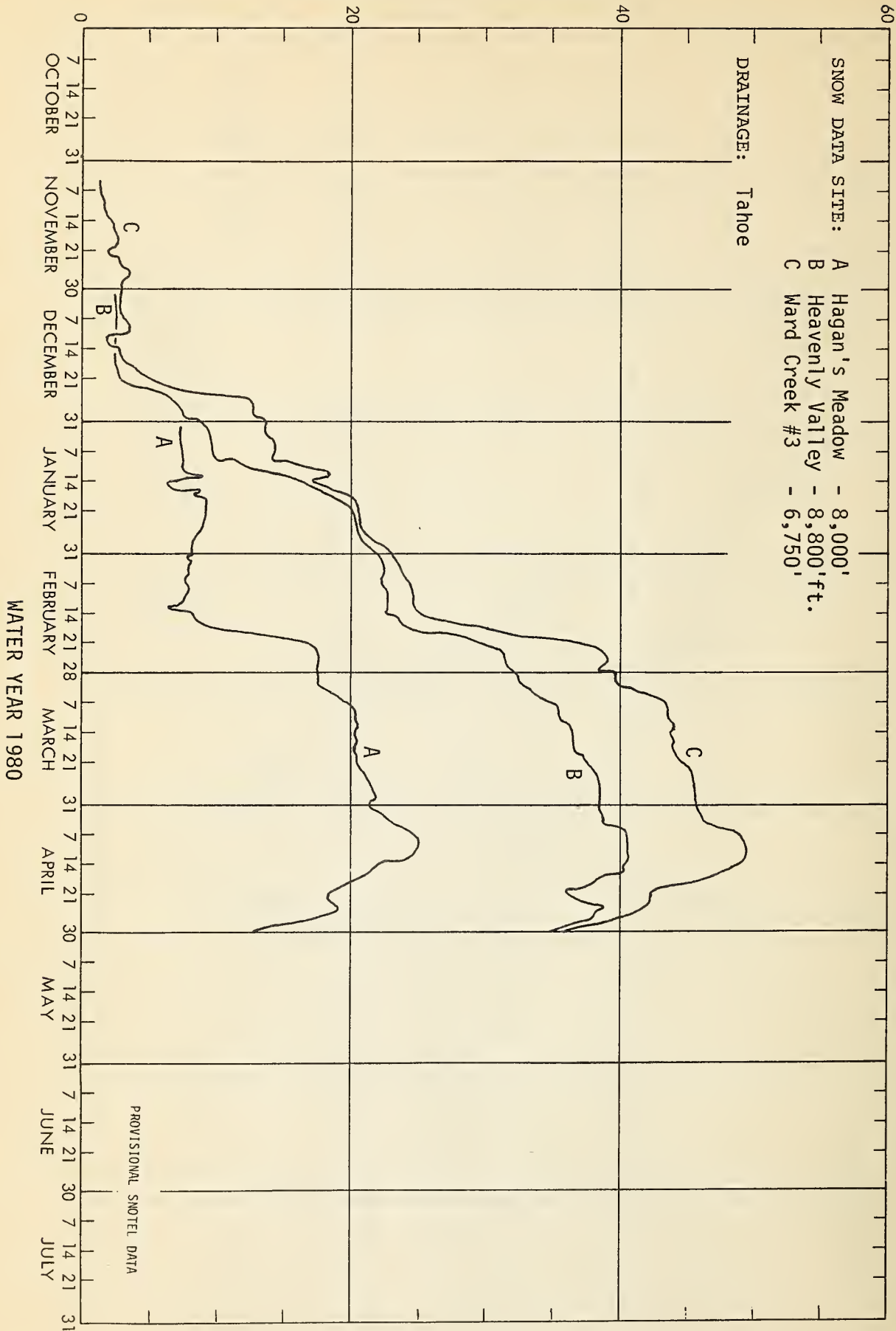
PRECIPITATION (Inches)

DRAINAGE BASIN and PRECIPITATION GAGE LOCATION	ELEVATION	CURRENT INFORMATION			FROM APPROX. OCT 1 TO DATE		
		Date of Reading	Month's Precipitation	Last Year	This Year	Last Year	1978
<u>TAHOE-TRUCKEE</u>							
Echo Peak (CA)	7,800	3/28/80 to 4/24/80	4.0	5.2	64.0	34.7	47.8
Fallen Leaf (CA)	6,300	3/31/80 to 4/30/80	1.9	2.6	41.8	20.5	32.6
Hagan's Meadow (CA)	8,000	3/31/80 to 4/30/80	2.5	4.5	41.4	28.3	36.1
Heavenly Valley (CA)	8,800	3/31/80 to 4/30/80	2.8	4.5	38.3	26.4	36.1
Independence Camp (CA)	7,000	3/31/80 to 4/30/80	1.8	3.1	43.2	27.4	36.9
Independence Creek (CA)	6,500	3/27/80 to 4/24/80	2.0	2.6	32.7	21.7	35.6
Independence Lake (CA)	8,450	3/31/80 to 4/30/80	3.5	4.6	57.3	26.8	45.7
Marlette Lake	8,000	3/31/80 to 4/30/80	2.5	5.5	40.5	28.6	37.1
Mount Rose	9,000	3/31/80 to 4/30/80	2.9	4.5	39.9	25.0	-
Mount Rose Ski Area	8,850	3/26/80 to 4/29/80	5.1	4.0	78.2	44.3	-
Rubicon #2 (CA)	7,500	3/28/80 to 4/24/80	3.4	5.3	52.0	33.1	-
Tahoe City Cross (CA)	6,750	3/26/80 to 4/24/80	2.7	-	48.8	-	-
Truckee #2 (CA)	6,400	NS	-	-	-	-	21.3
Ward Creek #3 (CA)	6,750	3/31/80 to 4/30/80	4.6	7.5	80.4	52.6	63.0
<u>CARSON-WALKER RIVER</u>							
Blue Lakes (CA)	8,000	1/31/80 to 5/1/80	16.5	-	48.0	36.7	46.8
Ebbetts Pass (CA)	8,750	3/31/80 to 4/30/80	4.3	3.4	64.8	39.2	46.6
Poison Flat (CA)	7,900	3/26/80 to 4/25/80	3.4	1.8	40.2	29.9	31.0
Leavitt Meadows (CA)	7,200	3/26/80 to 4/25/80	1.8	0.8	39.1	27.6	-
Lobdell Lake (CA)	9,200	3/31/80 to 4/30/80	2.6	1.6	29.4	19.9	29.6
Sonora Pass Bridge (CA)	8,800	3/31/80 to 4/30/80	2.0	1.7	44.4	30.7	37.7
Virginia Lakes Ridge (CA)	9,200	3/31/80 to 4/30/80	1.6	1.3	34.7	24.8	35.0
Wet Meadows #2 (CA)	8,050	3/26/80 to 4/25/80	5.2	3.9	60.3	36.5	34.9
<u>HUMBOLDT RIVER</u>							
Corral Canyon	8,500	3/31/80 to 4/30/80	2.0	4.0	22.7	21.3	25.3
Dorsey Basin	8,100	3/31/80 to 4/30/80	1.9	4.3	24.5	25.0	-
Green Mountain	8,000	3/28/80 to 5/2/80	2.2	3.1	22.2	22.5	23.4
Lamoille #3	7,700	3/28/80 to 5/2/80	2.7	3.7	23.7	20.8	25.4
Rodeo Flat	6,800	3/26/80 to 5/2/80	1.6	2.5	15.0	12.7	12.4
<u>SNAKE-OWYHEE RIVER</u>							
Bear Creek	7,800	3/31/80 to 4/30/80	2.3	3.7	28.0	23.0	20.6
Big Bend	6,700	3/31/80 to 4/30/80	1.5	1.4	14.5	12.4	13.4
Fawn Creek	7,000	3/26/80 to 5/2/80	3.1	3.2	28.6	25.0	-
Goat Creek	8,800	4/1/80 to 5/1/80	3.2	3.0	29.7	23.6	-
Jacks Peak	8,420	3/26/80 to 5/2/80	7.7	4.8	34.3	27.0	28.1
Laurel Draw	6,700	3/31/80 to 4/30/80	1.1	2.8	21.1	18.6	9.5
Pole Creek Ranger Station	8,330	4/1/80 to 5/1/80	2.6	1.5	17.7	16.0	-
Seventy Six Creek	7,100	3/31/80 to 4/30/80	1.3	4.7	17.1	19.8	14.0
Taylor Canyon	6,200	3/26/80 to 5/2/80	1.6	1.0	8.8	8.7	9.9
Jack Creek, Upper	7,250	3/31/80 to 4/30/80	1.3	4.0	21.5	20.9	20.7
<u>EASTERN NEVADA</u>							
Berry Creek	9,100	4/1/80 to 4/24/80	1.7	1.0	19.5	17.9	22.6
<u>NORTHERN GREAT BASIN</u>							
Cedar Pass (CA)	7,100	3/31/80 to 4/30/80	2.3	7.8	34.1	26.0	29.1
Dismal Swamp (CA)	7,000	3/28/80 to 4/30/80	3.9	-	43.6	-	-

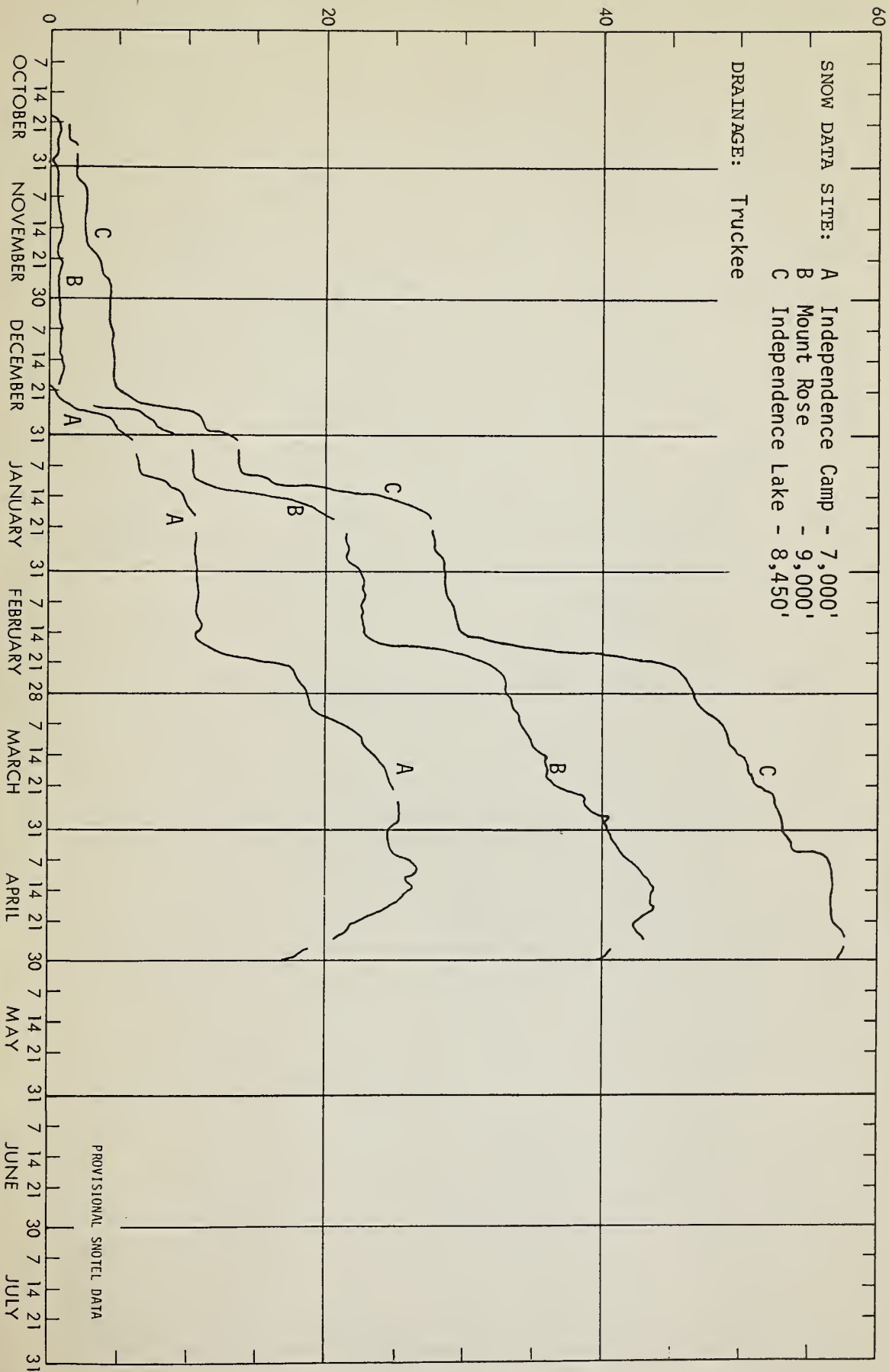


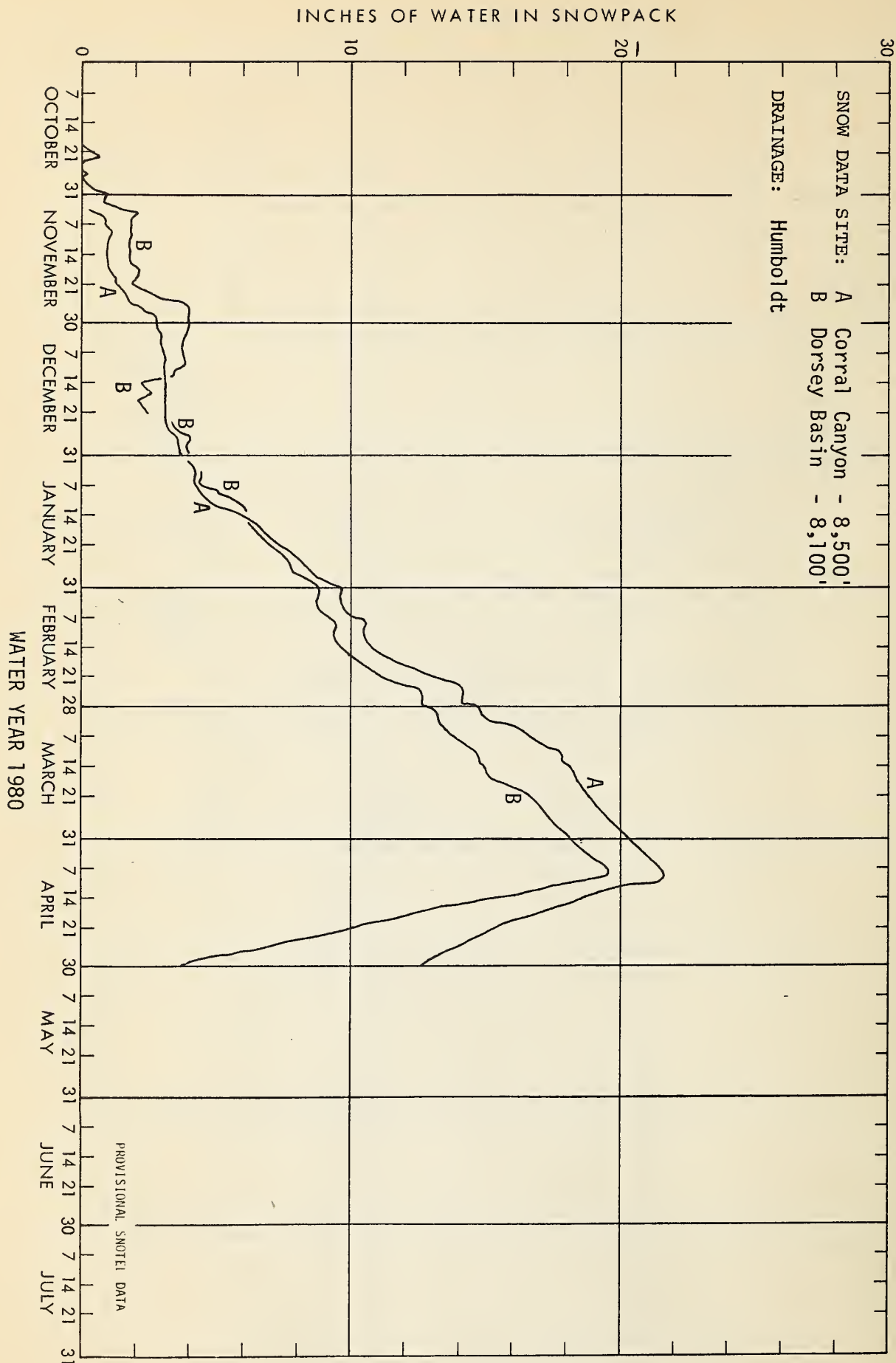


INCHES OF WATER IN SNOWPACK



INCHES OF WATER IN SNOWPACK





Agencies Cooperating in Collecting Data Contained in this Bulletin

FEDERAL

Agricultural Research Service
Bureau of Reclamation
Fish and Wildlife Service
Forest Service
Geological Survey
Soil Conservation Service
U. S. District Court - Federal Water Master
NOAA, National Weather Service

STATE

California Cooperative Snow Surveys
California Department of Parks and Recreation
California Department of Water Resources
Colorado River Commission of Nevada
Idaho Cooperative Snow Surveys
Nevada Association of Conservation Districts
Nevada Department of Conservation & Natural Resources
 Division of Water Resources
 Nevada State Forester
Oregon Cooperative Snow Surveys
University of Nevada, Desert Research Institute
Utah Cooperative Snow Surveys
White Mountain Research Station, Univ. of California

PRIVATE

Amalgamated Sugar Company
Kennecott Copper Corporation
Nevada Irrigation District
Owyhee Project North Board of Control
Owyhee Project South Board of Control
Pacific Gas and Electric Company
Pershing County Water Conservation District
Sierra Pacific Power Company
Truckee-Carsan Irrigation District
Walker River Irrigation District
Washoe County Water Conservancy District

Other organizations and individuals furnish valuable information for the snow survey reports. Their Cooperation is gratefully acknowledged.

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PROCUREMENT SECTION
CURRENT SERIAL RECORDS

FEDERAL - STATE - PRIVATE COOPERATIVE SNOW SURVEYS

Furnishes the basic data
necessary for forecasting
water supply for irrigation,
domestic and municipal water
supply, hydro-electric power
generation, navigation,
mining and industry

*"The Conservation of Water begins
with the Snow Survey"*